Arizona Transportation Research Center



Newsletter January 2006

Project Updates

Highlights from selected projects

STATE PLANNING AND RESEARCH (SPR) PROJECTS

SPR 580, Barcode Inventory System

This research project was directed toward evaluating a barcode system that might improve the efficiency of the Arizona Department of Transportation (ADOT) annual inventory process. BarlScan, Inc. was hired to conduct a survey of available technologies, recommend one that was perceived as cost-effective and conduct a pilot test to determine whether significant savings in time and effort could be achieved.

The Intellitrack Fixed Asset Software and Symbol PPT8800 device were selected for the project. The cost to purchase this combination of scanner and software was \$4,000.

The pilot test indicated that ADOT could save approximately 200 person-hours per year by using this technology to perform the annual inventory. This

savings would occur if the inventory function were centralized and the process conducted on a rolling schedule rather than the current simultaneous inventory throughout the agency.

In addition to saving time, the new technology should improve the accuracy of the inventory. Each asset would have to be identified and "tagged" only once. The Intellitrack software would remember and identify items by these tags in future inventories. Staff wouldn't have to guess the identity of items from brief, and sometimes cryptic descriptions appearing on computer printouts.

Finally, the centralization of the inventory function would enable a small staff to gain expertise on an agency-wide basis. Such expertise could be useful for strategic management of ADOT's fixed assets.

PPT 8800 Data Collection Terminals from Symbol - Batch

Small, Rugged and Packed with Power

The PPT 8800 combines superior data capture capability and wireless communications in a rugged handheld computer that is the smallest and lightest device in its class. The PPT 8800 is ideal for use in many environments where up-to-date information is needed at the point of activity.



New Projects Added to FY2006 Program

After a final accounting of the Federal research funds available from the fiscal year 2005 budget additional funds became available for five new research projects. The projects will be integrated into the FY2006 work program. ATRC project managers will begin forming technical advisory committees for these projects.

Project No.	New FY2006 Research Projects	Project Budget
SPR-615	ITS Concepts for Rural Corridor Management	\$125,000
SPR-616	Development of a Regional Safety Forecasting Tool	\$120,000
SPR-617	Evaluate effect of de-icing chemicals on rubberized pavements	\$100,000
SPR-618	Land Use and Traffic Congestion	\$100,000
SPR-619	Antelope Movements North of Interstate 40 in Arizona	\$97,000

Champions and Sponsors Now Required for Research Projects

The ADOT Research Council agreed to require Champions and Sponsors for all research projects. The Champion is a person promoting a project with a direct interest in the study results. A Sponsor is a person with the authority to move a project forward. The Sponsor has the authority to approve Technical Advisory Committee members and the work plan.

Research Peer Exchange

ATRC conducted a Research Management Peer Exchange from November 1-3, 2005. The Peer Exchange was held in accordance with Federal Highway Administration rules and is typically conducted every three years. The peer exchange team included the ATRC manager and research program managers from Illinois, New Hampshire, Texas and Washington State DOTs and an FHWA representative. The focus of the peer exchange was research implementation.

Among the recommendations was a suggestion to review executive management involvement in the research program through the Steering Committee. Also viewed as important to the program was the development of Sponsor and Champion roles for research projects.

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MISSION: The ATRC mission is to pursue and share knowledge in transportation systems and programs.